

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 22-42 are pending and under consideration.

I. Rejections under 35 U.S.C. § 101

In the Office Action, at pages 4-6, claims 22-42 were rejected under 35 USC § 101 as being directed to non-statutory subject matter. This rejection is respectfully traversed.

Each of the independent claims 22, 40, and 42 provide for generating a first operating point and a second operating point. As would be understood by one of ordinary skill in the art, an operating point is defined as being a specific point in the characteristic diagram or on the characteristic line of a technical device, whereby the point is taken based on the system properties and effects external influences and parameters. Such a characteristic line is a graphic representation of two physical quantities, which characterize the device, and is a line in a two-dimensional orthogonal system of coordinates. The characteristic diagram represents a quantity in dependency on two input quantities that are independent from each other, in shape of several characteristic lines or in a three-dimensional orthogonal system of coordinates. The system properties are set as properties that are characteristic for a system.

As such, each of the inventions of claims 22, 40, and 42 provide a useful, concrete, and tangible result. Furthermore, as a non-limiting reference, paragraph [0052] of the specification and Fig. 4 of the drawings clearly describe and illustrate that the claimed first and second operating points can be output to a memory, monitor, or printer. Accordingly, withdrawal of these § 101 rejections is respectfully requested.

II. Rejection under 35 U.S.C. § 102

In the Office Action, at pages 6-8, claims 22-42 were rejected under 35 USC § 102(b) as being anticipated by Marko et al. (U.S. Patent No. 5,361,628). This rejection is respectfully traversed.

To begin with, it is respectfully submitted that the Examiner has generally referred to large passages in Marko et al. and all the figures of Marko et al. as disclosing all of the features of independent claims 22, 40, and 42. Applicants respectfully request the Examiner to indicate more specific passages and figures in Marko et al. that the Examiner believes correspond to the claimed features.

Marko et al. does not discuss or suggest:

- weighting each individual target function with a weighting factor;
- solving an equation system in a variable space to produce operating points in a solution space, the equation system having the parameters and the weighting factors as variables, the equation system being solved by a predictor-corrector method comprising:

- generating a first operating point by determining a predictor as a stochastic variable in the variable space; and

- after generating the first operating point, generating a second operating point using a corrector method; and

- using the operating points to design the technical system,

as recited in claim 22. Instead, Marko et al. merely discloses an engine analyzer system and method for processing cold test measurements for classifying an engine. Furthermore, several interpretation methods are used in connection with a neural network classifier. For example, a higher value of two output nodes is used to indicate a pass/fail status of the engine. An example provides that if the path node value exceeds a given threshold, then the engines passes. Otherwise, the engine fails. However, Marko et al. does not disclose the above recited features of claim 22, such that claim 22 patentably distinguishes over Marko et al. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Claims 23-39 depend either directly or indirectly from claim 22, and include all the features of claim 22, plus additional features that are not discussed or suggested by the reference relied upon. Therefore, claims 22-39 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of these § 102(b) rejections is respectfully requested.

Marko et al. does not discuss or suggest:

- a weighting unit to weight each individual target function with a weighting factor;

- a processor to solve an equation system having the parameters and the weighting factors as variables in a variable space, the solutions of the equation system forming operating points of a solution space in the variable space, the operating points being determined by a predictor-corrector method comprising:

- generating a first operating point by determining a predictor as a stochastic variable in the variable space; and

- after generating the first operating point, generating a second operating point in a corrector step; and

- an output unit to output the operating points for the design of the

technical system,
as recited in claim 40, such that claim 40 patentably distinguishes over Marko et al. Accordingly,
withdrawal of the § 102(b) rejection is respectfully requested.

Claim 41 depends directly from claim 40, and includes all the features of claim 40, plus
additional features that are not discussed or suggested by the reference relied upon. Therefore,
claim 41 patentably distinguishes over the reference relied upon for at least the reasons noted
above. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Marko et al. does not discuss or suggest:

weighting each individual target function with a weighting factor;
solving an equation system in a variable space to produce
operating points in a solution space, the equation system having
the parameters and the weighting factors as variables, the
equation system being solved by a predictor-corrector method
comprising:
generating a first operating point by determining a predictor as a
stochastic variable in the variable space; and
after generating the first operating point, generating a second
operating point in a corrector step; and
using the operating points to design the technical system,

as recited in claim 42, such that claim 42 patentably distinguishes over Marko et al. Accordingly,
withdrawal of the § 102(b) rejection is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the
application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is
requested to telephone the undersigned to attend to these matters.


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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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